

## Enrichment Mini Course (EMC) Program Course Descriptions

*Courses listed alphabetically*

*\*All courses and instructors are subject to change*

Queen's ESU instructors are Queen's students, faculty, and community professionals who have demonstrated excellence in their field. They are eager to share their passion, knowledge, and enthusiasm with each of their students.

Queen's University Enrichment Studies Unit leverages the exceptional and unique resources, people, and facilities available at Queen's University to deliver safe, engaging, and industry-leading academic programming for elementary and secondary school students.

### Clinical Anatomy

#### Description

Do you want to get up close and personal with human anatomy? If yes, then this is the course for you! You will start by reviewing the five major systems of the body, including the musculoskeletal, cardiovascular, respiratory, nervous, and gastrointestinal. You will also get hands on experience working with cadaveric specimens and plastinated models and have an exclusive opportunity to visit the state-of-the-art Anatomy Museum and Laboratory to explore the human body, inside and out! Most importantly, you will be exposed to a challenging and engaging learning environment, led by highly-regarded experts in the field of anatomy at Queen's.

### Engineering Human Kinetics

#### Description

During this course, students will be introduced to the multidisciplinary nature of biomedical engineering. Students will learn about the biomechanics of a prosthetic arm as well as explore medical solutions that help people live fuller, more mobile lives through the investigation of innovative treatment strategies for bone and joint disorders, injuries and related problems. In addition to practicing safe handling of design tools participants will be exposed to a variety of educational technologies including: 3D design and printers, laser cutters and microcontrollers. Throughout this course, participants will learn more about the following engineering disciplines offered by the Faculty of Engineering and Applied Science at Queen's: Chemical, Electrical, and Mechanical

## Pathology & Molecular Medicine

### Description

Have you ever wanted to solve your own diagnostic case or learn how to find your blood type? If yes, then this is the course for you! This course will provide you with a thorough introduction to the field of Pathology – the study of diseases and the structural and functional changes they cause. You will interact with graduate students, professors, and doctors as you learn about genetics, cancer, neuropathology, and even have the opportunity to discuss education and career options. You will also extend your learning in the state-of-the-art Queen's University Anatomy Museum and Clinical Simulation Centre.

## Start Up Academy: Business Crash Course

### Description

From Ideation, iteration, prototyping, to MVP, funding, and scale. Students will learn the fundamentals of the “start-up” by critiquing and applying new venture development strategies. We will apply our creativity, our passion, and entrepreneurial spirit to learning all about Starting Up!

## Writing Compelling Fiction

### Description

You have imagination, passion, a love of stories, and you're great with words – so how do you take your writing to the next level? In this course, you'll discover the secrets to writing stories that stir readers' emotions and take them on a page-turning and meaningful adventure. You'll learn the essential elements of great plots as well as how to develop original story ideas, design memorable characters, hook your readers, and flesh out your hero or heroine's inner journey. Plus, short cuts for improving your writing style. Taught through a combination of collaborative games, creative exercises, lecture, and self-directed writing opportunities.